Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of	)	
	)	
Additional Spectrum for Unlicensed Devices	)	ET Docket No. 02-380
Below 900 MHz and in the 3 GHz Bands	)	

To: The Commission

COMMENTS OF APCO

The Association of Public-Safety Communications Officials-International, Inc. ("APCO") hereby submits the following comments in response to the Commission's *Notice of Inquiry*, FCC 02-328 (released December 20, 2002) ("*Notice*") in the above-captioned proceeding.

APCO is the nation's oldest and largest public safety communications organization. Founded in 1935, APCO has over 16,000 members, most of whom are state or local government employees involved in the management and operation of communications systems for police, fire, EMS, highway maintenance, disaster relief, forestry conservation, and other public safety agencies. APCO is also an FCC-certified frequency coordinator for Part 90 land mobile radio frequencies allocated in the Public Safety Pool.

The Commission is seeking comments regarding the potential for permitting unlicensed devices to operate in the television broadcast bands. APCO is deeply concerned with this proposal, insofar as it includes spectrum also allocated for public safety and other land mobile frequencies. In particular, portions of the 470-512 MHz band (TV channels 14-20) are allocated within a 50-mile radius of eleven major metropolitan areas for land mobile radio use, including

public safety.[1] Indeed, the 470-512 MHz band is the principal source of radio frequencies for some of the nation's largest public safety agencies.[2] APCO is equally concerned with the 764-776/794-806 MHz band (TV channels 63, 64, 68, and 69), which, pursuant to a Congressional mandate, has been reallocated nationwide for public safety radio services.[3]

Police, fire, EMS, and other public safety personnel depend upon reliable, ubiquitous, and interference-free radio communications to protect the safety of life, health and property. Thus, they cannot tolerate even the slightest potential for interference. Interference from unlicensed devices is particular troublesome, as it is nearly impossible to identify the source of such interference, especially if the interfering device is mobile or itinerant in its use. Of course, the goal must be to avoid interference in the first instance, not merely to have a mechanism to correct such interference should it occur.

The Commission suggests in the *Notice* that interference from unlicensed devices can be avoided by technologies that "monitor the spectrum to detect frequencies already in use and ensure that transmissions only occur on open frequencies." However, such technologies assume constant use on the protected frequencies, *e.g.*, a broadcast signal or other service transmitting a continuous carrier that can be detected at any time. In those situations, "silence" might infer an open frequency. That is not the case with public safety and other land mobile radio frequency use which, by its nature, is intermittent. A public safety frequency might be "quiet" one second, and used for critical emergency voice or data communication in the next second. Current

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[1] *See* 47 C.F.R.§90.313. The relevant metropolitan areas are Boston, New York, Philadelphia, Washington, Miami, Pittsburgh, Chicago, Houston, Dallas, Los Angeles, and San Francisco.

[2] *E.g.*, New York City Police Department, Los Angeles County Sheriff's Department, Los Angeles Police Department, and Boston Fire Department. Overall, public safety agencies in the 11 relevant metropolitan areas hold over 2,100 licenses for 470-512 MHz frequencies.

[3] *Report and Order in ET Docket No. 97-157*, 12 FCC Rcd 22953 (1997).

technology does not allow for frequency sharing in those circumstances, and any such future technology must first be proven in the field on non-public safety frequency bands.

The Commission also inquires whether geographic limitations could be placed on the operation of unlicensed devices. This appears to contemplate, for example, an unlicensed device operating on channel 16 (482-488 MHz), but somehow limited to operations in areas without either television or land mobile operations on the same frequencies. Yet, there is no effective means of restricting where an unlicensed device is used. How can the Commission be assured that the owner of a channel 16 device does not transport it to Los Angeles, San Francisco or New York, where channel 16 is used for critical public safety radio communications? By definition, there is no license, and the owner can transport the device at will, with or without Commission authority.

The Commission suggests that perhaps GPS technology can be used such that the unlicensed device knows where it is, and can "self-police" its ability to operate in certain areas. However, GPS technology will be of little or no value for unlicensed devices intended for in-building operation. In any event, the threat of tampering with or malfuncting of such-location controls would always exist, placing vital public safety communications at risk.

Finally, APCO notes that Congress has required that a portion of the "television broadcast spectrum" in the 746-806 MHz band (TV channels 60-69) be reallocated *exclusively* for public safety radio services, and the FCC has complied by reallocating TV channels 63, 64, 68, and 69. Any subsequent allocation or authorization of that spectrum for any other purpose, including unlicensed operations, would be a violation of the Congressional mandate.

CONCLUSION

Therefore, APCO urges that the Commission not give any further consideration to proposals that would permit unlicensed devices to operate in frequency bands used for public safety radio communications.

Respectfully submitted,

ASSOCIATION OF PUBLIC-SAFETY COMMUNICATIONS OFFICIALS-INTERNATIONAL, INC.

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